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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/642,976

08/18/2003

Brian E. Dalton

4389

3409

7590 05/30/2007  
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EXAMINER

SWIGER III, JAMES L

ART UNIT

PAPER NUMBER

3733

MAIL DATE

DELIVERY MODE

05/30/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/642,976

Applicant(s)

DALTON, BRIAN E.

Examiner

James L. Swiger

Art Unit

3733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/18/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-2, 5-6, 8, 10-11, 14-15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Beer et al. (US Patent 5,458,642). Beer et al. disclose a spinal assembly having at plates (11a and 11b) that have screw-receiving elements (the bores at the ends having screws (15a and 15b) receiving screws (Note: these are also considered screw-locking mechanisms) from respective vertebral elements, a means for permitting the distance between the elements at the ends to be shortened (springs 13c -

13g) wherein the entire device is considered as a whole to define an end and wherein the springs are capable of providing a continuous compressions as they are attached to the plates (Col. 4, lines 31-35). The device is capable of providing loading on graft material (12) disposed between the vertebral elements. The bores also function as screw head seats (see again 15a and 15b). The spring may also be considered a wire under tension, thus a compression spring.

In addition, the core/border (14) is capable of preventing the distance of the assembly from increasing. Its durable material helps the device to maintain specific shape.

Claims 1-2, 5-6, 8, 10-11, 14-15 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Sevrain (US Patent 7,008,427). Sevrain discloses a plate assembly having at least two plates (Fig. 2A), with screw receiving elements (apertures for the screws (see fig. 2A) that may also be considered a screw-locking mechanism or seats, a tension spring (39) that is capable of holding the plates in a compressed position (see also Col. 5, lines 60-65). This spring is also the means by which the distance between the two portions may be shortened. The spring may also be a wire.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was

made.

Claims 3-4 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sevrain '427 in view of Richelsoph et al. (US Patent 6,695,846). Sevrain disclose the claimed invention except for screw head seats that allow the screw to move a various 'attitudes,' considered as various orientations and a removable spacer. .

Richelsoph et al. disclose screw head seats (the recessed portion in the plates that allow movement of the screws, see Fig. 19), and a portion that may be considered a removable spacer (16) preventing the screw-receiving elements from being shortened at opposite ends. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Sevrain having at least screw head seats and a removable spacer in view of Richelsoph et al. to use the plate to compress the vertebrae.

Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sevrain '427 in view of Serbousek et al. (US patent 6,066,142). Sevrain discloses the claimed invention except for a torque driving device to apply tension to the wire spring. Serbousek et al. disclose a torque device (134/128) that causes torque to the spring (85, and see Fig. 5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Sevrain having at least a torque device in view of Serbousek et al. to better necessary torque to the assembly in use.

### ***Response to Arguments***

Applicant's arguments filed 3/8/2007 have been fully considered but they are not persuasive. In regards to the Beer et al. reference, it is understood that the springs of the device help to create a simulated natural disc. However, springs themselves are capable of both compression and tension. In light of this, the reference also teaches that the object of the invention is to have a disc that "compresses, flexes, twists, and expands in three dimensions" that would imply that the two plates, as anchored into the bone, could provide a compression force, by a means such as a spring. The screw-receiving elements are thus capable of having compression; they are prevented from having a distance further increasing by the elastomeric covering (see rejection above).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James L. Swiger whose telephone number is 571-272-5557. The examiner can normally be reached on Monday through Friday, 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JLS

5/23/2007



EDUARDO C. ROBERT  
SUPERVISORY PATENT EXAMINER